

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings of the claims in the application.

Listing of the claims

1 – 4. (Canceled)

5. (Currently Amended) A ~~pure~~ mutant strain of *P. fluorescens* selected from the group consisting of the mutant strain Pf201, Pf2012, Pf2013, Pf20118, Pf20137, Pf20118algJΔ, Pf20118algFA, Pf20118AlgLH203R and Pf201MC.

6. (Canceled)

7. (Currently Amended) The ~~pure~~ mutant strain of *P. fluorescens* of claim 5, wherein the said mutant strain is selected from the group consisting of: Pf2012, Pf2013, Pf20118, and Pf20137.

8 - 9. (Canceled)

10. (Currently Amended) The ~~pure~~ mutant strain of *P. fluorescens* of claim 5, wherein the said mutant strain is selected from the group consisting of: Pf20118algJΔ and Pf20118algfΔ.

11. (Canceled)

12. (Currently Amended) The ~~pure~~ mutant strain of *P. fluorescens* of claim 5, wherein the said mutant strain is Pf20118AlgLH203R.

13 - 14. (Canceled)

15. (Currently Amended) The ~~pure~~ mutant strain of *P. fluorescens* of claim 5, wherein the said mutant strain is Pf201MC.

16-37. (Canceled)

38. (New) A mutant strain of *P. fluorescens* being strain Pf201 or a variant thereof or a mutant strain of *P. fluorescens* which has the characteristics of strain Pf201 in relation to alginate production, wherein said variant or mutant strain produces at least 10 g alginate per liter medium and is stable over at least 60 generations.

39. (New) The mutant *P. fluorescens* strain of claim 38 which has a mutation corresponding to the mutation in strain Pf201 which results in alginate production at the level of at least 10g alginate per liter medium.

40. (New) The mutant strain of *P. fluorescens* of claim 38, wherein said mutant strain produces at least 10 g alginate per 40-55 g carbon source per liter medium.

41. (New) The mutant strain of *P. fluorescens* of claim 38, wherein said mutant strain produces at least 10 g alginate per 50-55 g carbon source per liter medium.

42. (New) The mutant strain of *P. fluorescens* of claim 38, wherein said mutant strain produces at least 10 g alginate per 40 g carbon source per liter

43. (New) The mutant strain of *P. fluorescens* of claim 38, wherein the said mutant produces an alginate consisting of mannuronate residues only.

44. (New) The mutant strain of *P. fluorescens* of claim 38, wherein the said mutant produces alginate having a defined guluronate residue (G)-content between 0 and 30%.
45. (New) The mutant strain of *P. fluorescens* of claim 38, wherein the said mutant produces alginate without, or with a reduced number of O-acetyl groups.
46. (New) The mutant strain of *P. fluorescens* of claim 38, wherein the said mutant produces alginate with a molecular weight of between 50,000 and 3,000,000 Daltons.
47. (New) The mutant strain of *P. fluorescens* of claim 38, wherein the mutant strain further comprises a mutant gene selected from the group consisting: a mutant *algG* gene, a mutant *algI* gene, a mutant *algJ* gene, a mutant *algL* gene, and a mutant *algF* gene.
48. (New) The mutant strain of *P. fluorescens* of claim 38, wherein the mutant strain further comprises a mutant *algG* gene which encodes an epimerase enzyme having reduced epimerase activity.
49. (New) The mutant strain of *P. fluorescens* of claim 38, wherein the mutant strain further comprises a mutant *algG* gene which is inactivated.
50. (New) A biologically pure bacterial culture of the mutant strain of *P. fluorescens* of claim 38.
51. (New) A mutant strain of *P. fluorescens* which comprises a mutant *algG* gene and produces alginate having a defined guluronate residue (G)-content between 0 and 30%, wherein said *algG* gene is inactivated or encodes an enzyme having reduced epimerase activity,

52. (New) A mutant strain of *P. fluorescens* which produces alginate, wherein in said mutant strain the alginate biosynthetic operon has been placed under the control of an inducible promoter which replaces the native promoter of said operon.
53. (New) The mutant strain of *P. fluorescens* of claim 52, wherein said mutant strain produces at least 10g alginate per liter medium.
54. (New) The mutant strain of *P. fluorescens* of claim 52, wherein the inducible promoter is a Pm promoter or a mutant thereof.
55. (New) The mutant strain of *P. fluorescens* of claim 52, wherein the inducible promoter is a Pm promoter, and the mutant strain further comprising an xylS gene.
56. (New) The mutant strain of *P. fluorescens* of claim 52, wherein the inducible promoter is a Pm promoter from *Pseudomonas putida* TOL plasmid.
57. (New) The mutant strain of *P. fluorescens* of claim 52, wherein the said mutant produces an alginate consisting of mannuronate residues only.
58. (New) The mutant strain of *P. fluorescens* of claim 52, wherein the said mutant produces alginate having a defined guluronate residue (G)-content between 0 and 30%.
59. (New) The mutant strain of *P. fluorescens* of claim 52, wherein the said mutant produces alginate without, or with a reduced number of O-acetyl groups.
60. (New) The mutant strain of *P. fluorescens* of claim 52, wherein the said mutant produces alginate with a molecular weight of between 50,000 and 3,000,000 Daltons.

61. (New) The mutant strain of *P. fluorescens* of claim 52, wherein the mutant strain further comprises a mutant gene selected from the group consisting: a mutant *algG* gene, a mutant *algI* gene, a mutant *algJ* gene, a mutant *algL* gene, and a mutant *algF* gene.
62. (New) The mutant strain of *P. fluorescens* of claim 52, wherein the mutant strain further comprises a mutant *algG* gene which encodes an epimerase enzyme having reduced epimerase activity.
63. (New) The mutant strain of *P. fluorescens* of claim 52, wherein the mutant strain further comprises a mutant *algG* gene which is inactivated
64. (New) A biologically pure bacterial culture of the mutant strain of *P. fluorescens* of claim 52.